

1021757

JUL 29 2002

## 510(k) SUMMARY

### Safety and Effectiveness

"This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92."

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#### CRPex-BR C-Reactive Protein LIT Assay

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##### Submitter

Name, Good Biotech Corp.  
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R.O.C.  
Telephone number, +886-4-23596873  
Contact person, Victor Chiou  
Preparation date May 24, 2002

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##### Device

Trade name, CRPex-BR C-reactive protein LIT assay  
CRPex-BR CRP calibrator set  
Common name, CRP immunological diagnostic assay  
Classification name C-reactive protein immunological test system (21CFR 866.5270)

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##### Predicate Device

Trade name, K-ASSAY CRP (1)  
K-ASSAY multi-calibrator.C  
510(k) number K992311

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##### Description

CRPex-BR C-reactive protein LIT Kit is the ready-to-use reagent suitable for quantification of C-reactive protein by latex particle enhanced immunoturbidimetry (LIT). Duck anti-CRP IgY ( $\Delta$  Fc) is

coupled to polystyrene microparticles, which greatly increased the analytical sensitivity.

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**Intended Use**

Good Biotech Corp. CRPex-BR C-reactive protein LIT kit is intended to be used for quantitative determination of C-reactive protein in serum. The measurement of C-reactive protein aids in evaluation of the amount of injury to body tissues.

For *in vitro* diagnostic use.

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**Substantial  
Equivalence**

CRPex-BR C-reactive protein LIT kit is compared with Kamiya Biomedical Company's K-ASSAY CRP (1) to demonstrate the substantial equivalence.

| Item\Device    | CRPex-BR<br>CRP LIT Kit   | K-ASSAY<br>CRP (1)  |
|----------------|---|---|
| Intended Use   | Measurement of C-reactive protein aids in evaluation of the amount of injury to body tissues. | Measurement of C-reactive protein aids in evaluation of the amount of injury to body tissues. |
| Methodology    | Latex particle enhanced immunoturbidimetry  | Latex particle enhanced immunoturbidimetry  |
| Test Objective | C-reactive protein  | C-reactive protein  |
| Test Principle | Latex microparticle agglutination based on antigen-antibody reaction                          | Latex microparticle agglutination based on antigen-antibody reaction                          |
| Type of Test   | Quantitative  | Quantitative  |
| Product Type   | Reagent 1 (R 1):<br>Reactive buffer solution<br>Reagent 2 (R 2):<br>Latex suspension          | Reagent 1 (R 1):<br>Reactive buffer solution<br>Reagent 2 (R 2):<br>Latex suspension          |

| Antibody<br>【Source】               | Duck anti-CRP IgY(ΔFc)<br>【Egg Yolk】   | Rabbit anti-CRP antibodies<br>【Serum】  |
|------------------------------------|--|--|
| Sterility                          | N.A.   | N.A.   |
| Specimen                           | Human serum  | Human serum  |
| Operating Requirement              | For professional use only  | For professional use only  |
| Calibration Mode                   | Spline   | Spline   |
| Calibrator                         | CRPex-BR Calibrator Set  | K-ASSAY CRP<br>Multi-Calibrator Set C<br>(standard protocol);<br>K-ASSAY CRP<br>Multi-Calibrator Set A<br>(high sensitivity protocol)            |
| Sample Volume                      | 3 µl/test  | 3 (15) µl/test   |
| Reagent Volume                     | R1 : 150 µl/test<br>R2 : 150 µl/test   | R1 : 150 µl/test<br>R2 : 150 µl/test   |
| Wavelength Selection               | Main-wavelength:570 nm<br>Sub-wavelength: 800 nm   | Main-wavelength:570 nm<br>Sub-wavelength: 800 nm   |
| Assay Code<br>【Hitachi 717 (7150)】 | 2 point:<br>(27)-(40)  | 2 point:<br>(28)-(42)  |
| Assay Range                        | 1-300 mg/L   | 1-300 mg/L (standard protocol)<br>0.1-20 mg/L (high sensitivity protocol)  |
| Calibration Curve                  | Nearly linear  | Nearly Curved  |
| Interference                       | Bilirubin C:<br>up to 60 mg/dl<br>Bilirubin F:<br>up to 60 mg/dl<br>Hemolysis:<br>up to 500-mg/dl<br>hemoglobin<br>Lipemia:<br>up to 10 g/L Liposyn®<br>(fat emulsion) | Bilirubin C:<br>up to 60 mg/dl<br>Bilirubin F:<br>up to 60 mg/dl<br>Hemoglobin:<br>up to 500 mg/dl<br>Lipid:<br>up to 1500 mg/dl<br>triglyceride |

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### Correlation

$$y = 0.976 x + 1.179 \text{ mg/L}$$

$x$  = K-ASSAY CRP (1)

$y$  = CRPex-BR C-reactive protein LIT kit

$R^2 = 0.998$

N = 94

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### Conclusion

Good Biotech Corp.'s CRPex-BR C-reactive protein LIT kit is substantially equivalent to the predicate device K-ASSAY CRP (1).



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Mr. Victor Chou  
President  
Good Biotech Corp.  
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407 Taichung City, Taiwan  
Taiwan R.O.C.

JUL 29 2002

Re: k021757

Trade/Device Name: CRPex-BR C-reactive protein LIT assay  
CRPex-BR CRP calibrator set

Regulation Number: 21 CFR 866.5270

Regulation Name: C-reactive protein immunological test system

Regulatory Class: Class II

Product Code: DCN

Dated: May 24, 2002

Received: May 29, 2002

Dear Mr. Chou:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,



Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical Laboratory-Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## STATEMENT OF INDICATIONS FOR USE

510(k) Number (if known): K 021757

Device Name: CRPex-BR C-reactive protein LIT assay  
CRPex-BR CRP calibrator set

### **Indications For Use:**

Good Biotech Corp. CRPex-BR C-reactive protein LIT assay is intended to be used for the quantitative determination of C-reactive protein in serum by latex particle enhanced immunoturbidimetry. The measurement of C-reactive protein aids in evaluation of the amount of injury to body tissues.

Good Biotech Corp. CRPex-BR CRP calibrator set is intended to be used with CRPex-BR C-reactive protein LIT assay for the quantitative determination of C-reactive protein in serum samples.

*For In Vitro Diagnostic Use.*

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

*J P Reeves for G. Altair*  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K 021757

Prescription Use /

OR Over-The-Counter Use \_\_\_\_\_

(Per 21 CFR 801.109)

(Optional Format 1-2-96)